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ABSTRACT

This study evaluated the short-term and long-term effects of three variants of a case-by-case process for readying students with learning disabilities to move successfully from resource rooms to regular classrooms for math instruction. Twenty-seven special educators from 21 elementary and middle schools and their 47 students with learning disabilities were assigned randomly to one of three experimental conditions or a control group. In the experimental conditions, students were prepared for the transition by use of curriculum-based measurement and transenvironmental programming, each alone and in combination. Educational placement, math achievement, and student attitudes about reintegration were assessed in special and regular education settings. Teachers using the more complex and labor-intensive variants of the case-by-case process were more successful at moving students across settings and fostering greater math achievement and positive attitude change, especially while the students were still in special education. Nevertheless, at 1-year follow up, about half of the 47 students had never been integrated or were moved to the mainstream temporarily, only to be returned to special education. One reason for the relatively high return rate may have been that reintegrated students' math achievement slowed considerably in the mainstream. Implications are discussed. Study data are presented in nine tables and one figure. (Contains 49 references.) (Author/DB)

Reintegrating Students with Learning Disabilities into the Mainstream: A Two-Year Study

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Abstract

Although a majority of the disability community in the United States supports separate special education placements, there is pervasive concern that too few students in special education programs leave for settings closer to the mainstream, if not the mainstream itself. Our study's purpose was to evaluate the short- and long-term effects of three variants of a case-by-case process for readying students to move successfully from resource rooms to regular classrooms for math instruction. Preparation for this transition included use of curriculum-based measurement and transenvironmental programming, each alone and in combination. Twenty-seven special educators from 21 elementary and middle schools and their 47 students with learning disabilities were assigned randomly to one of three experimental conditions or a control group. Educational placement, math achievement, and student attitudes about reintegration were assessed in special and regular education. Teachers using the more complex and labor-intensive variants of the case-by-case process were more successful at moving students across settings and fostering greater math achievement and positive attitude change, especially while the students were still in special education. Nevertheless, at one-year followup, about half of the 47 students either never were reintegrated or were moved to the mainstream temporarily, only to be returned to special education. One reason for the relatively high return rate may have been that reintegrated students' math achievement slowed considerably in the mainstream. Implications of these rather sobering findings are discussed.

Reintegrating Students with Learning Disabilities into the Mainstream:

A Two-Year Study

A basic principle in the Individuals with Disabilities Education Act (IDEA) is that special-needs students should receive education in the "least restrictive environment" (LRE). The LRE concept has two parts. First, it encourages social interaction between students with disabilities and their age-appropriate nondisabled peers. Second, it requires that special-needs students be provided an appropriate education, that is, one from which they can benefit. In some cases, the goal of an appropriate education can override the goal of social interaction: "Special classes, separate schooling, or other removal of disabled children from the regular educational environment occurs only when the nature and severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily" (20 U.S.C. § 1412(5)(B)). "Appropriate education" considerations are permitted to supercede "social interaction" goals because Congressional sponsors of the IDEA recognized that the mainstream may not be capable of providing an appropriate education to all students--and may even be harmful to some special-needs students (Stafford, 1978).

Cascade Model

Similar thinking prompted Congress to develop a "continuum of alternate placements"--including part-time resource programs, self-contained classes in regular schools, and separate day and residential treatment facilities--to ensure an appropriate education to all students with disabilities. This "cascade of services" model became part of the regulations governing the IDEA. For 20 years it has guided the educational placement of special-needs students in virtually all 15,173 school districts across the country. Although a majority of the disability community continues to support the cascade model (see Kauffman & Hallahan, 1995), increasing numbers of critics (e.g., Stainback & Stainback, 1992) and supporters (e.g.,

D. Fuchs & Fuchs, 1995) view it as contributing to this disturbing fact: once a student is placed in a separate special education program, that program too often becomes a terminal assignment in the child's educational career. In a recent article in The New York Times, Carol Gresser, president of the New York City Board of Education, was quoted as claiming that less than 5% of students with disabilities in the city's public schools ever return to regular classes (Dillon, 1994); in Buffalo, NY, and Rochester, NY, the percentages are 0.7% and 1.7%, respectively (J. Henry, personal communication, February 2, 1995).

Why the Cascade Model Doesn't Work More Often

Why in many school districts do special education placements resemble an educational gulag--a black hole from which many children fail to return? We offer three possible explanations, the first of which concerns the law itself.

IDEA is insufficiently prescriptive. Whereas the cascade model and LRE are central concepts in what the IDEA says about initial special education placements, these concepts are missing from the section of the law describing educators' post-placement responsibilities. Duties such as (a) establishing an individualized educational plan, (b) conducting an annual review of student progress, and (c) administering a comprehensive reevaluation at the end of 3 years are all discussed in the IDEA in relation to deciding whether the student should remain in the current special education setting or should be mainstreamed. There is no suggestion that a student's future placement should be selected from the same carefully graduated continuum of service options that guided selection of the student's initial education program. Thus, we believe the law inadvertently may discourage integration efforts by suggesting to educators that a given student has only two options--continuation in the current special education setting or placement in the mainstream--when, in fact, many more possibilities exist.

In contrast to the IDEA's apparent failure to incorporate the cascade model into its formulation of educators' post-placement obligations, The Council for Exceptional Children's (CEC) bylaws state that if a student's designated LRE is not the regular classroom, an important objective is to prepare him or her for transition to a setting closer to the regular classroom, if not the mainstream itself. CEC views no placement as permanent; rather, self-contained classes, resource rooms, and the like are conceptualized as stopovers en route to the eventual destination of the mainstream classroom. This training-for-the-next-setting concept (e.g., Cardin-Smith & Fowler, 1983; Vincent et al., 1980) does not mean that sooner or later all students with disabilities will be educated in the regular classroom. It does mean that teachers and administrators must judge their success, at least in part, by how far they advance their students "up" the cascade. In short, we believe that if the IDEA was as clear as CEC policy about educators' post-placement responsibilities, there would be fewer "black holes" into which special-needs students disappear.

Research on reintegration is meager. Even if the IDEA were rewritten to more closely resemble CEC policy, many special and general educators probably would be uncertain about how to transfer special-needs students into LREs closer to the mainstream, if not into the mainstream itself. This is because few detailed and validated transition procedures exist to guide practitioners. Scott and Fuchs (1992), for example, looked for studies that (a) involved school-age students, (b) described transition procedures in sufficient detail to permit replication, and (c) measured student outcomes in terms of academic or social performance. "Transition" was defined as moving children from a self-contained setting in a separate school to a self-contained setting in a regular school; from a self-contained setting to a resource room program in the same school; or from a resource room to a mainstream classroom. Scott and Fuchs hand-searched eight special education journals and the ERIC database for the years 1975 to 1991, inclusive. They found just eight pertinent efforts: Demers (1981); D. Fuchs, Fuchs, Fernstrom, and Hohn (1991); Grosenick (1971); 2 studies reported in Haring and Krug (1975); Russo and Koegel (1977); Tillona (1986); and Weinstein (1974). Although a majority of these studies are meritorious, their median publication date is 1976; only three employed a control or contrast group; and none randomly assigned teachers or students to treatment conditions.

Compounding the effects of this dearth of transition studies on the special education field is that many policymakers, researchers, practitioners, and others seem to hold the illusory belief that <u>many</u> such studies exist; that if we know anything, it is how to transfer special-needs children across program settings. One cause of this misunderstanding, we believe, is that reintegration studies, especially those exploring how best to move special education students into regular classrooms, are often equated incorrectly with the more numerous mainstreaming studies, exemplified by the so-called efficacy research. Mainstreaming studies, by definition, explore the effects on students with disabilities of <u>being there</u>; the students have already re-entered before such studies start. Reintegration investigations, by contrast, focus on the process of <u>getting there</u>; they begin with (typically weaker) student participants in special education, not regular education settings. Thus, not only do educators lack important knowledge about how to move students with disabilities across program settings, they appear unaware of just how little they know in this area.

<u>Is the cascade model workable</u>? In discussing why the cascade model is not more often associated with the successful transfer of students with disabilities into regular classes or LREs closer to the mainstream, we have suggested that practitioners obtain inadequate guidance from lawmakers and researchers. Implicit is that lawmakers, researchers, and other "facilitators" have failed both the model and the teachers and administrators trying to implement it. An alternate view, of course, is that the model has failed the facilitators and practitioners. This explanation recognizes the difficulty involved in making the cascade model work. Moving

children successfully "up" the cascade presupposes that special educators are willing and able to provide individualized intensive instruction that prepares students for the academic, behavioral, and social requirements of the next-least-restrictive environment; it requires that teachers in different settings communicate effectively about their respective definitions of "satisfactory" performance and "appropriate" behavior and about their curricula, instructional materials, motivational strategies, and homework, testing, and grading policies; it depends on administrative leadership that makes advancement within the cascade structure a priority--a priority that translates, for example, into an opportunity for all educators to become familiar with their district's full range of placement options. Achieving these and other preconditions is no mean feat; one legitimately may ask, How effective and "do-able" is the cascade model?

That similar questions may be directed at alternate and equally understudied approaches, like full inclusion with team teaching, does not absolve supporters of the cascade model from a responsibility to provide evidence that the model can work. Until such evidence is provided, supporters of the cascade will be unable to respond effectively to critics' charges that it is little more than an impediment between students and more inclusive settings (e.g., O'Neil, 1995).

Study Purpose: Component and Longitudinal Analyses

Our investigation explored the effectiveness of one strategy for moving students with learning disabilities from resource programs into regular classrooms for math instruction--and doing so responsibly. By "responsibly," we mean reintegrating students case by case so that (a) they have the academic skills and school behaviors required by the mainstream setting prior to entry, and (b) the regular education math teacher is familiar with the returning student's strengths and weaknesses and is confident that the child was prepared to perform adequately and behave appropriately. Our reintegration procedure reflects the melding of a well-known measurement procedure--curriculum-based measurement (CBM)--and a transition process--transenvironmental programming (TP). Because we were interested in developing an effective and efficient process, one that practitioners would be willing and able to use, our evaluation included a component analysis of the reintegration procedure; that is, we implemented three versions of it: TP-only, CBM-only, and TP+CBM. We contrasted these variants against each other as well as compared them to a control group. Moreover, we conducted our study across two years to follow reintegrated students for one year following transition. In this way, we investigated both short-term and long-term effects of our case-by-case reintegration approach.

Year 1

Method

Three Variations of the Reintegration Process

As mentioned, the full version of the reintegration procedure involves two basic elements: TP and CBM. Because each has been discussed many times in the literature, by us and others (e.g., Anderson-Inman, 1981; Deno, 1985; D. Fuchs, Fuchs, & Fernstrom, 1993), only thumbnail descriptions are provided below.

TP-only. TP is a process to transition students with special needs across program settings. It comprises four phases, the first of which is environmental assessment. Because it is assumed that effective preparation of a student with disabilities for mainstreaming can be accomplished best by first identifying the academic and behavioral expectations of this environment, the purpose of the first phase is for special and regular educators collaboratively to ascertain the specific skills and behaviors required for success in the regular classroom. This knowledge then can be used to help plan both the content of instruction in the special education setting and, eventually, instructional modifications in the mainstream. In the second phase, intervention and preparation, the special educator teaches the skills identified during the preceding phase. Next, in promoting transfer across settings, the special and regular educators help ensure that the reintegrating student actually uses the newly acquired skills in regular education. In the final phase, evaluation in the mainstream, data are collected on the extent to which the student has adjusted academically and socially. In the TP-only condition, special and regular educators' reintegration planning was guided by TP, but special educators did not use CBM to ready their reintegration candidates for transition.

CBM-only. CBM is a set of standardized procedures for obtaining valid measures of student achievement in math, reading, spelling, and written expression, which in turn facilitate teachers' formative evaluation of their teaching effectiveness. Research demonstrates that instructional programs designed with CBM can result in greater student achievement, improved teacher decision making, and enhanced student awareness of their own performance (e.g., L. Fuchs, Deno, & Mirkin, 1984; L. Fuchs & Fuchs, 1986). In the CBM-only condition, special educators used CBM to develop more effective instructional interventions and to conduct frequent assessments of the reintegration candidates' academic progress and readiness for mainstream math instruction. However, there was no TP to guide special and regular educators' interactions pertaining to reintegration.

TP+CBM. The full version of the reintegration procedure differs most importantly from the TP-only and CBM-only conditions in the second of TP's four phases ("intervention and preparation"). By this point in the process, special and regular educators already have come together (a) to identify salient discrepancies between their respective classrooms and between the reintegration candidate's performance/behavior and the mainstream teacher's expectations; (b) to select interventions to be implemented in special education or the mainstream math classroom; and (c) to choose several low-achieving nondisabled peers whose academic performance, indexed by CBM, will become a standard against which the reintegration candidate's progress will be measured before and after transition. In the second phase of the TP+CBM condition, the special educator tries various instructional strategies, often in an inductive or trial-and-error fashion, to promote math achievement, which is indexed by twice-weekly CBM probes. If such feedback indicates insufficient progress relative to the low-achieving nondisabled peers' math growth, the special educator is expected to modify his or her instruction. The student, meanwhile, tries to best previous performance on the probes.

The "game plan," then, in the second phase of the TP+CBM process is based on the salient discrepancies identified jointly by special and regular educators; the plan is not to "fix" the whole child nor to make him or her perfect prior to mainstreaming. On average, it takes special educators several months to help prepare their students for transition into mainstream math classrooms. For a more detailed description of these procedures (in math and reading) see D. Fuchs, Dempsey, Roberts, and Kintsch (1995); D. Fuchs, Fernstrom, Scott, Fuchs, and Vandermeer (1994); D. Fuchs, Fuchs, and Fernstrom (1992); and D. Fuchs et al. (1993).

Participants

Special education teachers. In late fall of 1989 we contacted special educators in a Tennessee metropolitan school district and in two contiguous counties to determine their interest in participation. We offered a small cash stipend. Twenty-two teachers in the metropolitan school district and 3 from each of the two counties agreed to participate, representing 22 elementary and middle schools. Each of these 28 teachers was asked to identify two students who, at some point in the school year, might be ready for reintegration into a mainstream math class. Teachers were encouraged to consider the students' math performance, classroom behavior, and motivation. Thus, the identification process relied on special educators' informal understanding of implicit school norms, rather than on a formalized procedure, such as applying a cutoff score to performance on an achievement test.

Collectively the teachers identified 50 students with learning disabilities in grades 3 through 7. Three students moved away during the school year before posttreatment testing was completed. The loss of these students also entailed the loss of one special educator and one school from the study.

With but two exceptions, the special educators were assigned randomly to the three experimental conditions and one control group: two teachers had participated in a related study the previous year and had been trained in either TP or CBM. To maintain a sense of continuity for these individuals, they were assigned to the same treatment in which they had already participated. Seven, eight, six, and six special educators participated in TP+CBM, TP-only, CBM-only, and control conditions, respectively.

Table 1 presents demographic information about these 27 special educators by treatment group. The four groups were similar with respect to age, education level, gender, race, number of students in math class, and number of years teaching in special education; however, there was a significant difference between teachers in the combined TP groups (TP+CBM and TP-only) and the combined no-TP groups (CBM-only and controls) with respect to mean number of years teaching in regular education (0.33 vs. 3.83), $F(1,23) = 5.46$, $p < .05$.

Special education students. Of the 47 reintegration candidates, 36 were designated "experimentals"; 11 became "controls." Of the 36 experimental students, 13 participated in TP+CBM procedures; 12 in TP-only; and 11 in CBM-only. Reintegration was also planned for control students, but they did not participate in either TP or CBM; rather, they were to be prepared for reintegration by their special education teachers in the "typical" manner.

Table 2 displays demographic information about the 47 students with learning disabilities in each of the four treatment groups. All students met federal and state criteria for certification as learning disabled--a discrepancy of more than 1 standard deviation between achievement and cogniti- -tellectual functioning when provided learning experiences appropriate to age and ability level. The groups were similar with respect to age, gender, grade level, and total minutes in special education instruction. However, the mean IQ score of the TP groups combined (97.00) was significantly greater than that of the no-TP groups combined (88.59), $F(1,43) = 9.61$, $p < .01$. In addition, there was a significant TP x CBM interaction for race: the percentage of white students in TP-only was greater than that in TP+CBM, χ^2 (1 df) = 5.53, $p \leq .01$, and in control, χ^2 (1 df) = 3.81, $p = .05$. Further, students in the combined no-CBM groups were receiving significantly more minutes (59.57) of special education math instruction per day than the number (54.63) received by those in the combined CBM groups, $F(1,43) = 11.36$, $p < .01$.

Regular education teachers. The 21 experimental special educators (in TP+CBM, TP-only, and CBM-only) recruited 30 mainstream math teachers for the 36 experimental students targeted for reintegration (6 regular educators each agreed to reintegrate two students). Potential recruits (a) taught math at a time that accommodated the reintegration candidates' scheduling needs, (b) taught classes that were not in immediate danger of violating a state-mandated cap on class size, and (c) were open to the idea of reintegrating a student from special education. Thus, pragmatic considerations guided recruitment of regular educators, which precluded random selection. Regular educators were offered a small cash stipend in return for their participation. In their usual manner, the 6 control teachers targeted 10 regular classrooms as possible reintegration settings for 11 students (1 regular educator agreed to reintegrate two students).

Table 3 displays demographic information by treatment group on the 34 regular educators who received at least one reintegrating student. There were no significant differences by treatment group except with regard to number of students in math class: there were significantly fewer students in the TP than in the no-TP combined groups (21.90 vs. 25.93), $F(1,30) = 6.17$, $p < .05$.

Project staff. Five project staff members, who were master's or doctoral students in special education and former special and regular educators in public schools, were assigned to study schools as follows: four were assigned to 5 or 6 schools, working with 6 or 7 special educators, 9 to 11 reintegration candidates, and 8 to 10 regular educators; one was assigned to one school to work with 3 special educators, 6 reintegration candidates, and 4 regular educators. Within each of the 4 treatment groups, study participants were divided among at least 3 different staff members, to guard against the undue influence of individual staff members on a particular group. Across staff persons and the study's duration, the mean number of total hours spent per reintegration candidate was 38.17 ($SD = 10.30$) for TP+CBM, 15.83 ($SD = 4.60$) for TP-only, 28.47 ($SD = 6.24$) for CBM-only, and 12.76 ($SD = 3.74$) for control. As expected, an ANOVA with two between-subjects factors (TP vs. no TP; CBM vs. no CBM) yielded significant main effects for both TP and CBM: mean number of total hours spent per reintegration candidate was greater in the combined TP groups than in the combined no-TP groups (27.45 vs. 20.61), $F(1,43) = 10.27$, $p < .01$; and mean number of total hours spent per reintegration candidate was greater in the combined CBM groups than in the combined no-CBM groups (33.73 vs. 14.36), $F(1,43) = 91.75$, $p < .001$. There was no significant TP x CBM interaction, $F(1,43) = 2.72$, ns.

Staff members were trained to accomplish four objectives. First, they were expected to collect teacher and student data reliably. Second, they were prepared to provide technical assistance to the special and regular educators. Specifically, they were responsible for teachers understanding TP and CBM interventions, for having all necessary project-related materials, and for proceeding with reintegration in a timely fashion. Third, staff was directed to maintain a written, running record of special educators' efforts to mainstream control students. This permitted exploration of whether special educators in the control group began using TP or CBM to reintegrate their students. No such "contagion" was reported. Finally, staff members were expected to express interest in control teachers' professional circumstances, which was intended to help balance the interest they showed in teachers in TP-only, CBM-only, and TP+CBM. Staff was encouraged to ask control teachers one or more of the following questions during each visit: What and how are you currently instructing the reintegration candidate?; How is the student doing?; Are improvements sufficient to merit serious consideration of reintegration?; What reintegration planning, if any, have you undertaken?; What's happening to the student outside this classroom in terms of his or her interaction with other teachers, peers, and family members?

Measures

Three measures were used in this component analysis. They explored placement in the mainstream, math achievement, and student attitudes toward reintegration.

Placement. Placement was determined by asking the special educator, for each reintegration candidate, At the end of Year 1, is the student receiving math instruction in the targeted regular classroom? If so, the student's placement was "in regular education"; if not, "in special education."

Math Operations Test-Revised. The instrument used to measure math achievement was the Math Operations Test-Revised (MOT-R; L. Fuchs, Fuchs, & Hamlett, 1989), which systematically samples math problems across grades 1 through 6 from the operations portion of the Tennessee curriculum. This curriculum encompasses a statewide set of competencies expected for promotion and tested annually in selected grades in a statewide, high-stakes assessment program. Students are provided directions in standard format and have 10 minutes to complete 50 problems (or 142 digits). Performance is scored as numbers of correct digits and problems written in answers. In a previous investigation, criterion validity with respect to the Concepts of Number and Math Computation subtests of the Stanford Achievement Test was .80 and .78, respectively, and internal consistency reliability (Cronbach's alpha) was .85 (L. Fuchs, Fuchs, Hamlett, & Stecker, 1991). Percentage of agreement between scorers on 16 protocols from this study was 99.

The MOT-R was deemed useful and appropriate because it was derived from a statewide curriculum equally applicable to the experimental and control groups and, therefore, should assess achievement on curriculum targeted for all groups. Moreover, it represents more than a simple index of mastery of each individual student's grade-level CBM test; it encompasses the state's entire operations curriculum for grades 1-6. Project staff tested students in groups of six or less in quiet places in the students' schools.

Student attitude questionnaires. Two versions of an 11-item questionnaire were developed. One was administered to experimental and control students in special education; the other was given to the students who reintegrated into mainstream settings. The two versions were very similar and asked respondents to rate how strong a math student they believed they were and the degree to which they believed they belonged in their current math placement, and to report their feelings and attitudes (positive and negative) about leaving or having left special education to go to the mainstream for math instruction. Students responded to each question using a five-point Likert-type scale (1 = negative, 5 = positive). The questionnaires were administered by project staff, one-to-one, in a quiet location in the students' schools. (The questionnaires and MOT-Rs were administered in separate sessions.) In training, staff members were shown how their behavior might inadvertently affect students' responses, and they were encouraged to conduct the session in a friendly but standard manner.

Data Collection and Analysis

During Year 1, student questionnaires and MOT-Rs were administered at three points in time: coincident with the investigation's start-up ("pretreatment"), immediately preceding students' reintegration into a mainstream math class ("midtreatment"), and at study's end ("posttreatment"). Pre- and midtreatment data on these two measures were collected on the 47 reintegration candidates; posttreatment data, on 38 reintegrated students.

Placement of the 47 reintegration candidates at posttreatment was analyzed using hierarchical log-linear methods, which calculate chi square statistics for more than two categorical factors. This analysis included three factors: placement, TP, and CBM. Performance (in digits correct) on the MOT-R and responses on student questionnaires for all 47 reintegration candidates were analyzed by two-between (TP vs. no TP; CBM vs. no CBM), one-within (pretreatment vs. midtreatment) ANOVAs; for the 38 students who reintegrated, the analyses were identical except that the "within" factor was pretreatment vs. midtreatment vs. posttreatment.

Due to small N and low statistical power, "marginally significant" ($.05 < p < .10$) effects are reported in addition to those at $p < .05$, and the Student-Newman-Keuls test was used for multiple comparisons. To complement our use of tests of significance with the math achievement data, we also computed effect sizes to convey information about the magnitude of between-group differences. Effect sizes were calculated using Glass, McGaw, and Smith's (1981) formula.[1]

Results

As indicated above, Year 1 data are organized by the three points at which the data were collected: pre- and midtreatment data were collected on 47 "reintegration candidates"; posttreatment data were obtained on only the 38 "reintegrated students."

Reintegration Candidates

Placement. By the end of Year 1, 12 of 13 students (92.3%) in the TP+CBM group were moved to regular education for math instruction; in TP-only, 11 of 12 (91.7%); in CBM-only, 9 of 11 (81.8%); and in control, 6 of 11 (54.5%). Analysis of rates of placement by hierarchical log-linear methods yielded a marginally significant interaction, placement x TP, χ^2 (3 df) = 6.93, $p < .10$. Followup analyses suggested that (a) the regular education placement rate of controls was significantly lower than that of the three experimental groups combined (88.9%), χ^2 (1 df) = 4.39, $p < .05$; (b) the control group's mainstream placement rate was marginally less than that of the TP+CBM group, χ^2 (1 df) = 2.74, $p < .10$; and (c) rates of placement in the mainstream were higher for students receiving TP than not (92% vs. 68.2%), χ(1 df) = 2.89, $p < .10$. Placement rates were not significantly different for students receiving CBM than not (87.5% vs. 73.9%), χ^2 (1 df)= 0.66, ns.

Achievement: MOT-Rs. Table 4 displays means and standard deviations of digits correct for all 47 reintegration candidates, by treatment group, at pre- and midtreatment in special education. Analyses indicated a significant CBM x time interaction: mean gains were greater for students receiving CBM than not (10.33 vs. 2.04). Also see Figure 1.A for the four groups' gains from pre- to midtreatment. Effect sizes for TP+CBM vs. TP-only and for TP+CBM vs. control were .20 and .30, respectively; for CBM-only vs. TP-only and CBM-only vs. control, .44 and .50, respectively.

Student attitude questionnaires. Table 5 shows responses by treatment group of all 47 reintegration candidates to the 11-item questionnaire at pre- and midtreatment in special education. ANOVAs run on each question yielded at least marginally significant treatment main effects and interactions for 4 of the 11 questions: First, in comparison with those in no-CBM groups, students in CBM groups demonstrated a stronger change in feeling that they did not belong in special education for math instruction (Quest. 1; 0.80 vs. -0.40); in particular, such change in both TP+CBM (1.00) and CBM-only (0.55) was greater than in TP-only (-0.83). Second, students in CBM groups also showed greater "gains" in believing they would fit in with their peers in the regular classroom (Quest. 11; 0.92 vs. 0.17); specifically, changes in TP+CBM (1.62) were greater than in TP-only (-0.08), in CBM-only (0.09), and in control (0.45). Third, students in no-CBM groups displayed more positive change than CBM students in expecting peers in the regular education setting to be friendly (Quest. 10; 0.61 vs. 0.08). And fourth, no-TP students showed more positive change than TP students in believing the regular education teacher would expect them to be as good math students as their peers in the regular classroom (Quest. 7; -0.32 vs. 0.55).

As shown in Table 5, analyses indicated at least marginally significant main effects for time for 7 of the 11 questions: reintegration candidates across the four treatment groups displayed positive changes from pre- to midtreatment in (a) feeling happy about leaving special education for math (Quest. 3; 3.28 to 3.62); (b) expecting to like regular education math better than special education math (Quest. 4; 2.89 to 3.57); (c) expecting to receive considerable help from the regular education teacher (Quest. 5; 3.17 to 3.57); (d) thinking that work in regular education math would not be difficult (Quest. 6; 2.72 to 3.36); (e) expecting the regular education teacher to be friendly (Quest. 9; 4.04 to 4.34); (f) expecting the regular education students to be friendly (Quest. 10; 3.87 to 4.21); and (g) feeling that they would fit in with their peers in the regular classroom (Quest. 11; 3.19 to 3.74).

<u>Reintegrated Students</u>

<u>Achievement: MOT-Rs</u>. Table 6 provides means and standard deviations by treatment group of digits correct at pre- and midtreatment in special education and at posttreatment in regular education for the 38 (of 47) students who were reintegrated. Analyses indicated a

marginally significant CBM x time interaction: mean gains for CBM students from pre- to midtreatment were greater than those of no-CBM students (9.33 vs. 3.06). See also Figure 1.B. Effect sizes for TP+CBM vs. TP-only was .19; for TP+CBM vs. control, .25; for CBM-only vs. TP-only, .30; for CBM-only vs. control, .38.

There were no significant interactions for the mid-to-posttreatment interval (see Table 6 and Figure 1.B), and there was a noteworthy weakening in effect sizes associated with the CBM groups: for TP+CBM vs. TP-only, -.19; for TP+CBM vs. control, .18; for CBM-only vs. TP-only, -.08; for CBM-only vs. control, .26.

Student attitude questionnaires. Table 7 shows responses by treatment group of the 38 students who reintegrated to the 11-item questionnaire at pre- and midtreatment in special education and at posttreatment in regular education. A two-between (TP vs. no TP; CBM vs. no CBM), one-within (pretreatment vs. midtreatment vs. posttreatment) ANOVA, run on each question, examined two time intervals: pre- to midtreatment and mid- to posttreatment. From pre- to midtreatment, analyses yielded at least marginally significant treatment main effects and interactions for 3 of the 11 questions. First, students in CBM demonstrated stronger change than no-CBM students toward feeling that they did not belong in special education for math instruction (Quest. 1; 0.86 vs. -0.59); in particular, changes in both TP+CBM (1.00) and CBM-only (0.67) were greater than in TP-only (-0.91). Second, CBM students also showed greater positive change in believing that the regular education teacher would expect them to be as good math students as the students in the regular classroom (Quest. 7; 0.33 vs. -0.41). Third, students in the TP+CBM group displayed greater "gains" in feeling that they would fit in with their peers in regular education than did TP-only, CBM-only, and control (Quest. 11; 1.75 vs. -0.09, 0.22, and 0.50, respectively). From mid- to posttreatment there were no significant treatment results.

There were at least marginally significant time main effects for 8 of the 11 questions: Reintegrated students across treatment and control groups made reliable pre- to midtreatment (but not mid- to posttreatment) gains on 5 questions: (a) feeling confident about being a good student in the regular education math classroom (Quest. 2; means for pre-, mid-, and posttreatment, respectively: 3.37, 3.82, 3.84); (b) liking the regular education math classroom better than special education (Quest. 4; means: 2.97, 3.68, 3.66); (c) thinking the work in regular education math would not be difficult (Quest. 6; means: 2.71, 3.45, 3.26); (d) finding the regular education teacher to be friendly (Quest. 9; means: 4.11, 4.40, 4.47); and (e) feeling that they fit in with peers in the regular classroom (Quest. 11; means: 3.16, 3.82, 4.16). Reintegrated students made reliable mid- to posttreatment (but not pre- to midtreatment) gains on 2 questions: (a) feeling that they did not belong in special education for math instruction (Quest. 1; means: 3.11, 3.32, 3.95); and (b) believing that the regular education teacher would expect them to be as good math students as the students in the regular classroom (Quest. 7; means: 3.76, 3.76, 4.29). On the question regarding expected help from the regular education math teacher, reintegrated students made reliable gains from pre- to midtreatment and from mid- to posttreatment (Quest. 5; means: 3.05, 3.61, 4.03).

Year 2

Method

Participants

Special education students. Of the 38 students with disabilities who were reintegrated during Year 1, 22 were still receiving math instruction in the mainstream one year later during the last half of Year 2; these students constituted the "success" group. However, no data other than placement could be collected on 2 of these students: one, a control student in Year 1, had been receiving math instruction in the mainstream but left school just prior to collection of followup data; the parent of another, in CBM-only in Year 1, refused permission for tests and questionnaires to be administered.

Project staff. One member of the staff from Year 1 was responsible for locating and collecting data on the 38 students who had reintegrated during Year 1.

Measures

The measures used in Year 2 included placement, MOT-Rs, and student attitude questionnaires, and were the same as in Year 1 with this exception: Placement at followup (Year 2) of the 38 reintegrated students was designated as "in special education" or "in regular education." Placement at followup of the 47 original candidates was defined using a combination of two criteria, namely, placement at the end of Year 1 and placement at followup, yielding four categories: (1) not reintegrated in Year 1 and not in regular education math at followup; (2) not reintegrated in Year 1 but in regular education math at followup; (3) reintegrated in Year 1 and still in regular education math at followup ("success" group); (4) reintegrated in Year 1 but not in regular education math at followup. The form of the followup student questionnaire was the same as that administered at posttreatment in Year 1.

Procedures

No interventions were conducted in Year 2; the only study activity, once students were located and parental permission obtained, was the collection of followup data. Project staff confirmed the location of 36 students in either the same schools they had attended in Year 1 or "feeder" schools. The remaining 11 students were located through contact with their special education teachers from Year 1 or through school districts' special education offices.

Data Collection and Analysis

All followup data were collected between mid-March and early June of Year 2; MOT-Rs were administered between mid-April and early June. For all measures except placement, data were analyzed only for those 20 "success" students who were found still to be in regular education and for whom we had written permission to test and interview.

Placement at followup of the 47 original reintegration candidates in the four categories defined above yielded the following numbers: 7, 2, 22, and 16 students in categories 1-4, respectively. Association of treatment with distribution of students among these four categories was analyzed with hierarchical log-linear methods to perform a chi square analysis with four factors: placement at the end of Year 1, placement at the end of Year 2, TP, and CBM. Association of treatment with placement at followup of the 38 reintegrated students (categories 3 and 4) was also analyzed by hierarchical log-linear methods, using three factors: placement at the end of Year 2, TP, and CBM. Data from MOT-Rs and student questionnaires were analyzed on 20 "success" students at pre-, mid-, and posttreatment, and followup using two-between (TP vs. no TP; CBM vs. no CBM), one-within (pretreatment vs. midtreatment vs. posttreatment vs. followup) ANOVAs.

Due to small N and low statistical power, we again report "marginally significant" ($.05 < p < .10$) effects in addition to those at $p < .05$, and we again used Student-Newman-Keuls test for multiple comparisons. To complement our use of tests of significance with the student math achievement data, we also computed effect sizes, using Glass, McGaw, and Smith's (1981) formula.

Results

Placement

Of the 13 original reintegration candidates in the initial TP+CBM group, 8 (61.5%) had reintegrated during Year 1 and were still in regular education math at followup. Rates for the original reintegration candidates in TP-only and CBM-only were 5 of 12 (41.7%) and 5 of 11 (45.5%), respectively. Controls had the lowest rate at 4 of 11 (36.4%). However, these "success" rates were not significantly different, χ^2 (1 df) = 1.39, ns. (Note that two other students--one in TP+CBM and one in control--reintegrated during Year 2 but were not among the "success" group.)

Of the 38 students who reintegrated during Year 1, TP+CBM and control had the highest rates of remaining in regular education at followup: 8 of 12 (66.7%) and 4 of 6 (66.7%), respectively; followed by CBM-only, at 5 of 9 (55.6%), and TP-only, at 5 of 11 (45.5%). These rates were not significantly different, χ^2 (1 df) = 0.95, ns.

Achievement: MOT-Rs

Table 8 presents by treatment group the math scores for the 20 "success" students at pre-, mid-, and posttreatment, and followup. There were no significant interactions involving treatment. However, an analysis of effect sizes reveals a more interesting story. From pre- to midtreatment, CBM groups outperformed the control group by .75 standard deviations. TP-only bested controls by .38 standard deviations. From mid- to posttreatment, however, effect sizes for each of the three experimental groups vs. the control group only ranged from .12 to .19. And from posttreatment to followup, effect sizes for TP+CBM vs. control was -1.01; for CBM-only vs. control, -1.24; and for TP-only vs. control, -.69. (Also see Figure 1.C.)

Student Attitude Questionnaires

Table 9 shows responses by treatment group of the 20 "success" students to the 11-item questionnaire at pre- and midtreatment in special education and at posttreatment and followup in regular education. ANOVAs run on each question examined four time intervals: pre- to midtreatment, mid- to posttreatment, posttreatment to followup, and pretreatment to followup. Analyses yielded at least marginally significant treatment main effects and interactions for 3 of the 11 questions. First, with regard to not belonging in special education for math instruction, students in CBM groups showed stronger positive changes than no-CBM students from pre- to midtreatment (Quest. 1; 1.25 vs. -0.63); but students in no-CBM groups showed stronger positive changes than CBM groups from posttreatment to followup (1.13 vs. -0.42). Second, "gains" in feeling happy about leaving special education for math instruction were greater for CBM students than no-CBM from pre- to midtreatment (Quest. 3; 1.00 vs. -0.25); but students in no-CBM groups demonstrated greater positive change from mid- to posttreatment (0.75 vs. -0.25) and from posttreatment to followup (0.88 vs. -0.25). Third, with regard to fitting in with peers in the regular classroom, from pre- to midtreatment CBM students showed more positive changes than did no-CBM students (Quest. 11; 1.50 vs. 0.13), and, in particular, change evidenced by students in TP+CBM (2.25) was greater than in TP-only (0.00), CBM-only (0.00), and control (0.33). However, no-CBM students displayed greater positive changes than did CBM students from mid- to posttreatment (1.13 vs. 0.17). In addition, "gains" in TP+CBM from pretreatment to followup were greater than in CBM-only (2.25 vs. -0.75).

There were at least marginally significant time main effects for 7 of the 11 questions. On two of those questions "success" students across treatment and control groups showed strong positive changes from pre- to midtreatment and from pretreatment to followup: (a) liking the regular education math classroom better than special education (Quest. 4; means for pre-, mid-, and posttreatment, and followup, respectively, were 2.60, 3.65, 3.70, 3.70); and (b) expecting considerable help from the regular education math teacher (Quest. 5; means: 3.20, 3.60, 4.05, 3.85). With regard to (c) fitting in with peers in the regular classroom, students made gains from pre- to midtreatment, from mid- to posttreatment, and from pretreatment to followup (Quest. 11; means: 2.70, 3.65, 4.20, 4.15). Students made gains from posttreatment to followup and from pretreatment to followup on two of the seven questions: (d) finding that the regular education math teacher graded their work no more leniently than that of other students (Quest. 8; means: 3.55, 3.70, 3.70, 4.80); and (e) the friendliness of students in the regular education math classroom (Quest. 10; 3.95, 4.20, 4.10, 4.65). On two of the seven questions, students made gains from pretreatment to followup only: (f) feeling happy about leaving special education for math instruction (Quest. 3; means: 3.00, 3.50, 3.65, 3.85) and (g) feeling that they do not belong in special education for math instruction (Quest. 1; means: 2.80, 3.30, 3.75, 3.95).

Discussion

Before proceeding, we wish to draw attention to several study features that may bear on the internal and external validity of the investigation. First, although special educators (with two exceptions) were assigned randomly to one of four treatment conditions, our unit of analysis was student, not teacher. Second and related, despite that the four groups of students were alike on many dimensions (see Table 2), they were not equal on all: TP groups combined had higher IQ scores than no-TP groups combined, and, at the study's start, CBM groups were in special education math for less time than no-CBM groups, suggesting that students in the latter groups may have been weaker students (see Table 2). Thus, when in our discussion below we ascribe (explicitly or otherwise) between-group differences in placement, math achievement, and attitudes, to the treatment conditions, the reader should understand that there may be alternate explanations of these differences.

Regarding external validity, we note that special and regular educators volunteered to participate. Some, no doubt, were motivated by the challenge, or by a belief that they were doing "the right thing," or simply by an interest to learn something new. Others may have been influenced by our cash stipends. Irrespective of motive, they represent a self-selected group. As such, their project-related efforts are not necessarily indicative of the response one might expect from a majority of teachers to similar reintegration proposals. Second, special educators relied on personal judgment when choosing reintegration candidates, rather than on explicit formulae like a cutoff score. Whereas they appeared comfortable with the informality of such decision making, its lack of explicitness contributes to our uncertainty about how or why they chose whom they did and complicates our desire to provide direction to non-study teachers interested in moving students into the mainstream. Third, CBM was used to aid special and regular educators' instruction of math computation skills. It is unclear whether our procedures apply to the reintegration of students with difficulty in the area of math applications, let alone whether those procedures might generalize to an entirely different academic area such as language arts. With these caveats on the table, we turn to a discussion of our data.

Placement

A two-year look at the process of reintegrating a sample of students with learning disabilities into mainstream classrooms produced a rather sobering picture. Regarding placement, 49% (23 of 47) of the reintegration "candidates"--those students characterized by their special education teachers as likely to reintegrate sometime during the 1989-90 school year--either never reintegrated or did so only briefly before being sent again to special education. Underscoring the importance of this low return rate was the considerable amount of technical assistance given the special and regular educators through inservice training, the provision of instructional materials, and project staff's collaboration with the teachers and their occasional direct work with the teachers' students--all told, more than 1,000 hours of technical assistance in Year 1 across the four treatment conditions. If the study's special and regular educators could manage the two-year inclusion of only 47% (22 of 47) of the original reintegration candidates, one legitimately may ask, How many students might they be expected to transition for 2 or more years when left to their own devices?

In terms of the four treatment groups, 5 of 12 students (41.7%) in TP-only and 5 of 11 (45.5%) in CBM-only and 4 of 11 control students (36.4%) were moved into regular education for math instruction during Year 1 and were still there one year later. By contrast, 8 of 13 students (61.5%) in the TP+CBM group were reintegrated during Year 1 and were found in the mainstream at followup. As mentioned above, among the three experimental approaches to reintegration studied, only TP+CBM produced (marginally) significantly higher rates of reintegration than controls in Year 1. In Year 2, however, there were no reliable placement-by-treatment interactions, partly reflecting the smaller sample sizes and correspondingly lower statistical power, but reflecting, too, the sizable number of mainstreamed students returned to special education for math instruction in each group: 4, 6, 4, and 2 for TP+CBM, TP-only, CBM-only, and controls, respectively.

Achievement

As for reintegration candidates ($\underline{n}$ = 47), those in TP+CBM and CBM-only made significantly greater math progress in special education (pre- to midtreatment) than did students in the no-CBM groups (i.e., TP-only and controls); effect sizes ranged from .20 to .50, favoring the CBM groups. Likewise, among just the students who reintegrated in Year 1 ($\underline{n}$ = 38), those in CBM groups reliably outperformed those in no-CBM groups in special education, with effect sizes ranging from .19 to .38. However, once these students moved into the mainstream (mid- to posttreatment), none of the experimental groups did better than controls. For the "success" group ($\underline{n}$ = 20), no statistically significant differences involving treatment group were obtained for any of the time periods. In terms of effect sizes, however, CBM groups outperformed no-CBM groups from pre- to midtreatment, with effect sizes ranging from .11 to .75. But from mid- to posttreatment, these same comparisons yielded considerably smaller effect sizes: between .19 and -.11. Taken together, these results suggest that TP+CBM and CBM-only, while relatively effective in the short term, were insufficient "inoculators" against academic difficulties in the long run. Put another way, whereas students in the CBM groups made modest but steady progress in special education, they did not maintain this rate of growth in regular education, which may explain the disappointingly high rate at which reintegrated students were returned to special education. This failure to thrive in regular education--also observed among a different cohort of reintegrated students in an earlier, related study (D. Fuchs et al., 1992; D. Fuchs et al., 1993)--creates an unsettling expectation that some or many of those in the "success" group also may not remain in the mainstream for long.

Although these achievement and placement data are disappointing and troubling, they are not entirely surprising. After all, study participants were students with learning disabilities. Whereas some believe that such children are not disabled (e.g., Algozzine, 1985; Pugach, 1988; Skrtic, 1991; Sleeter, 1986), a large handful of studies have characterized children with learning disabilities as experiencing severe learning difficulties and as demonstrating mean achievement levels and growth rates far below those of "garden variety" underachievers (e.g., Donahoe & Zigmond, 1990; Merrell, 1990; Shinn, Tindal, Spira, & Marston, 1987; Zigmond et al., 1995). No instruction--including exemplary special education instruction--cures such children. Rather, it helps them cope. If they are to survive in mainstream classrooms, they must be given the same relentless, systematic instruction they (hopefully) received in special education. If regular education fails to provide such help, why should we expect many students with learning disabilities to perform well enough to remain there?

In this study, we did not collect data systematically on regular educators' instruction of reintegrated students. However, anecdotal reports by project staff suggested at least two tentative conclusions about the mainstream teachers. First, many believed themselves incapable of accommodating the academic needs of students with learning disabilities; second, they rarely modified instruction in response to students' persistent failure to learn and, when they did so, such modifications were minor in substance and oriented to the group, not the individual. Research by us (e.g., L. Fuchs, Fuchs, Hamlett, Phillips, & Karns, in press) and others (e.g., Baker & Zigmond, 1990; McIntosh, Vaughn, Schumm, Haager, & Lee, 1993; Schumm & Vaughn, 1991, 1992; Zigmond et al., 1995) supports these informal observations, which may be viewed as possible explanations for the reintegrated students' poor academic performance in the mainstream.

Scruggs and Mastropieri's (1994) description of regular educators' apparently successful efforts to include students with disabilities corroborates the foregoing in the sense that their small group of teachers seems to represent "the exception that proves the rule." Scruggs and Mastropieri studied three individuals reputed to be highly skillful at including children with varying disabilities in their hands-on science classes. Scruggs and Mastropieri determined that the teachers' apparent success could be explained by the co-occurrence of seven conditions or variables: administrative support, support from special education personnel, accepting classroom atmosphere, appropriate curriculum, effective teacher skills, peer assistance, and disability-specific teaching skills. Although Scruggs and Mastropieri undoubtedly believe--as do we--that one can learn from such exemplars, they also leave no doubt about how exceptional they regard these teachers and classrooms to be. They write, "Whether . . . such variables [facilitating exemplary inclusive practice] are generally present in today's schools appears [unlikely]" (p. 806).

Student Attitude

Experimental (and especially CBM) groups exhibited stronger improvement in attitude from pre- to midtreatment than from mid- to posttreatment, a pattern that paralleled the math performance of students in the CBM groups. Among the 38 who reintegrated, for example, students in TP+CBM and CBM-only demonstrated stronger positive change from pre- to midtreatment than TP-only and control students in feeling they did not belong in special education math and in believing the regular education teacher would expect them to be as good math students as their nondisabled peers. Similarly, students in TP+CBM showed greater positive change in feeling they would fit in with their mainstream peers than did CBM-only, TP-only, and control students. However, there were no significant treatment results for the 38 reintegrated students from mid- to posttreatment.

An absence of statistically significant and positive change from mid- to posttreatment in the attitude ratings may signal a subtle change in student attitudes toward reintegration. On the other hand, it may reflect a "ceiling" effect; that is, one can make only so much improvement on a 5-point scale, especially when most of the midtreatment ratings were between 3.50 and 4.50 (see Table 7). More important, we do not wish to imply that student attitude about reintegration turned decidedly negative in the regular classroom. A descriptive (i.e., nonstatistical) comparison of mid-to-posttreatment means across the 11-item questionnaire and four study groups shows that 23 of 44 (52%) contrasts were positive--meaning that the reintegrated students' average at posttreatment was greater than their average at midtreatment; only 14 (23%) of the comparisons reveal higher midtreatment means, with the remainder showing no differences. Moreover, looking (again descriptively) at the 14 instances in which mean posttreatment ratings were less than midtreatment ratings, the median score at posttreatment was 4.00 on our 5-point scale, hardly suggesting a negative sentiment among the 38 reintegrated students.

Thus, on average, attitude about reintegration remained relatively positive in regular education among the four groups of reintegrated students with learning disabilities despite that for at least the two CBM groups, math progress slowed considerably. D. Fuchs, Fuchs, and Fernstrom (1992, 1993) obtained very similar results on students with learning disabilities who were followed for about 6 weeks after their reintegration into mainstream math classrooms. Our present findings are all the more noteworthy because they were collected 12 weeks, not 6 weeks, after the students' return to regular education. Such recurring results appear somewhat discordant with a rather persuasive literature that suggests that, in comparison with normally developing peers, students with learning disabilities tend to be less accepted and more rejected by nondisabled classmates (e.g., Bruininks, 1978; Bryan, 1976; Gresham & Reschly, 1986; Siperstein & Goding, 1983) and tend to have more negative self-concepts (e.g., Bruininks, 1978; Bryan & Pearl, 1979; Rogers & Saklofske, 1985), at least partly because of their poor academic achievement (e.g., La Greca & Stone, 1990).

Implications

The most obvious implication of this longitudinal investigation for practice and policy may be this: Reintegrating a student case by case--ensuring that s/he has the requisite mainstreaming skills and behaviors and that the regular educator is willing and able to make the necessary accommodations--isn't easy. It is labor intensive and demands serious commitment from special and general educators. Moreover, our component analysis suggests there may be no clever short cuts. Students in TP+CBM--the most complete and time-consuming variant of the reintegration processes investigated--tended to do better than students in more economical versions of reintegration in terms of placement, math achievement, and positive attitude change from pre- to midtreatment, the time they were in special education for math instruction. Indeed, the failure of many in the study sample to remain in mainstream math and to sustain the rate of academic growth in regular education that was demonstrated in special education signals the need to do more, not less, in the name of case-by-case reintegration. Specifically, it seems additional intervention may be necessary in regular education to sustain the progress achieved in special education. But how likely is this? How reasonable is it to presume that regular educators will be willing to play a more active role in helping to ensure the successful, long-term reintegration of students with learning disabilities? On the other hand, what's the alternative to this case-by-case approach? Full inclusion, for example--as described by well-meaning professionals like the Stainbacks (1992), as opposed to those not necessarily well-meaning school administrators looking to full inclusion as a means of cutting costs at all cost (see Leo, 1994)--presents a probably more difficult scenario. At this point, we are tempted to conclude that moving students with learning disabilities (as well as other special-needs students with relatively high academic potential) successfully into the mainstream and into other least restrictive environments may be among the most challenging tasks facing educators. That most seem oblivious to this fact does not augur well for successful reform, for the effective use of the cascade model, nor, most importantly, for the futures of many children with special needs.

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Notes

1.

$$\text{Effect size} = \frac{\underline{M}_1 - \underline{M}_2}{\dfrac{\underline{s}}{\sqrt{2(1 - \underline{R})}}}$$

where:
$\underline{M}_1$ = mean of DIFF for group 1
$\underline{M}_2$ = mean of DIFF for group 2
DIFF = $\text{SCORE}_{\text{later}} - \text{SCORE}_{\text{earlier}}$
$\underline{s}$ = pooled standard deviation of DIFF over groups 1 and 2
$\underline{R}$ = correlation of $\text{SCORE}_{\text{earlier}}$ with $\text{SCORE}_{\text{later}}$

Table 1. Special Education Teacher Demographic Data by Treatment Group (n = 27)

	TP (n = 15)				No TP (n = 12)			
	CBM (n = 7)		No CBM (n = 8)		CBM (n = 6)		No CBM (n = 6)	
	n (%)	M (SD)	n (%)	M (SD)	n (%)	M (SD)	n (%)	M (SD)
Age (years)		33.71 (10.58)		33.63 (4.17)		38.00 (8.37)		35.50 (10.37)
Education level								
BA/BS	3 (42.9)		2 (25.0)		2 (33.3)		3 (50.0)	
MA/MS	4 (57.1)		5 (62.5)		4 (66.7)		3 (50.0)	
EdS/EdD	0 (0.0)		1 (12.5)		0 (0.0)		0 (0.0)	
Gender								
Female	6 (85.7)		7 (87.5)		6 (100.0)		6 (100.0)	
Male	1 (14.3)		1 (12.5)		0 (0.0)		0 (0.0)	
Number of math students		10.29 (8.88)		9.25 (5.55)		10.17 (2.86)		9.00 (5.18)
Race								
Nonwhite	1 (14.3)		1 (12.5)		1 (16.7)		1 (16.7)	
White	6 (85.7)		7 (87.5)		5 (83.3)		5 (83.3)	
Years in RE		0.00 (0.00)		0.63 (1.41)		4.00 (4.90)		3.67 (6.50)
Years in SE		7.29 (7.27)		8.75 (3.15)		7.83 (5.19)		8.67 (4.55)

Note. RE = regular education; SE = special education.

Table 2. Student Demographic Data by Treatment Group (n = 47)

	TP (n = 25)		No TP (n = 22)	
	CBM (n = 13)	No CBM (n = 12)	CBM (n = 11)	No CBM (n = 11)
	n (%) M (SD)	n (%) M (SD)	n (%) M (SD)	n (%) M (SD)
Age (years)	11.00 (1.63)	10.33 (1.15)	10.91 (1.30)	11.09 (1.58)
Full Scale IQ	94.08 (10.84)	100.17 (12.93)	89.27 (4.78)	87.91 (5.20)
Gender				
Female	4 (30.8)	3 (25.0)	4 (36.4)	3 (27.3)
Male	9 (69.2)	9 (75.0)	7 (63.6)	8 (72.7)
Grade level				
3	3 (23.1)	2 (16.7)	1 (9.1)	2 (18.2)
4	2 (15.4)	4 (33.3)	4 (36.4)	1 (9.1)
5	2 (15.4)	2 (16.7)	1 (9.1)	5 (45.5)
6	6 (46.2)	4 (33.3)	5 (45.5)	1 (9.1)
7	0 (0.0)	0 (0.0)	0 (0.0)	2 (18.2)
Race				
Nonwhite	8 (61.5)	1 (8.3)	5 (45.5)	6 (54.5)
White	5 (38.5)	11 (91.7)	6 (54.5)	5 (45.5)
Time in SE before project (mins)				
Math class	55.08 (7.42)	60.00 (0.00)	54.09 (6.25)	59.09 (2.02)
Total	181.54 (110.70)	197.00 (111.43)	155.64 (85.41)	162.82 (76.30)

Note. Full Scale IQ = Full Scale score on WISC-R, for more than 85% of the sample.

SE = special education.

Table 3. Regular Education Teacher Demographic Data by Treatment Group (n = 34)

	TP (n = 20)				No TP (n = 14)			
	CBM (n = 10)		No CBM (n = 10)		CBM (n = 8)		No CBM (n = 6)	
	n (%)	M (SD)	n (%)	M (SD)	n (%)	M (SD)	n (%)	M (SD)
Age (years)		41.50 (7.84)		39.00 (6.58)		41.13 (8.84)		40.50 (8.80)
Education level								
BA/BS	4 (40.0)		3 (30.0)		2 (25.0)		3 (50.0)	
MA/MS	6 (60.0)		7 (70.0)		5 (62.5)		3 (50.0)	
EdS/EdD	0 (0.0)		0 (0.0)		1 (12.5)		0 (0.0)	
Gender								
Female	8 (80.0)		10 (100.0)		7 (87.5)		6 (100.0)	
Male	2 (20.0)		0 (0.0)		1 (12.5)		0 (0.0)	
Number of math students		19.60 (5.30)		24.20 (3.39)		26.13 (3.48)		25.67 (7.28)
Race								
Nonwhite	4 (40.0)		4 (40.0)		2 (25.0)		1 (16.7)	
White	6 (60.0)		6 (60.0)		6 (75.0)		5 (83.3)	
Years in RE		16.30 (8.87)		13.70 (8.46)		15.75 (6.61)		11.17 (9.04)
Years in SE		0.00 (0.00)		0.00 (0.00)		0.25 (0.71)		1.83 (4.49)

Note. RE = regular education; SE = special education.

Table 4. Reintegration Candidates' Math Scores (Digits Correct) in Special Education by Treatment Group (n = 47)

	TP (n = 25)				No TP (n = 22)							
	CBM (n = 13)		No CBM (n = 12)		CBM (n = 11)		No CBM (n = 11)		TIME	TP x TIME	CBM x TIME	TP x CBM x TIME
Time	M	(SD)	M	(SD)	M	(SD)	M	(SD)	$F(1,43)$	$F(1,43)$	$F(1,43)$	$F(1,43)$
Pretreatment	59.23	(25.55)	59.50	(24.43)	52.27	(18.61)	52.00	(25.61)	16.17**	0.13	7.54*	1.50
Midtreatment	67.31	(17.26)	62.83	(24.05)	65.27	(20.34)	52.64	(29.25)				

*$p < .01$. **$p < .001$.

Table 5. Reintegration Candidates' Attitude Questionnaires in Special Education by Treatment Group ($n = 47$)

Questions	Time point	TP ($n = 25$) CBM (n=13) M (SD)	TP ($n = 25$) No CBM (n=12) M (SD)	No TP ($n = 22$) CBM (n=11) M (SD)	No TP ($n = 22$) No CBM (n=11) M (SD)	TIME $F(1,43)$	TP x TIME $F(1,43)$	CBM x TIME $F(1,43)$	TP x CBM x TIME $F(1,43)$
1. Belong in SE math? (1=definitely yes, 5=absolutely not)	Pre	3.08 (1.32)	3.42 (1.38)	2.91 (1.51)	3.00 (1.41)	1.02	0.35	8.30**	3.01^{+}
	Mid	4.08 (1.04)	2.58 (0.79)	3.45 (1.51)	3.09 (1.38)				
2. How confident that you could be good RE math student? (1=not; 5=very)	Pre	3.62 (1.26)	3.33 (1.44)	3.82 (1.40)	2.55 (1.29)	2.67	0.12	0.32	2.01
	Mid	4.46 (0.78)	3.33 (1.50)	3.91 (1.04)	3.00 (1.41)				
3. If leave SE math tomorrow, how would you feel? (1=very sad; 5=very happy)	Pre	3.08 (1.50)	3.08 (1.38)	4.09 (1.14)	2.91 (1.38)	3.86^{+}	0.35	0.75	2.85^{+}
	Mid	3.92 (1.32)	3.08 (1.31)	4.18 (1.08)	3.27 (1.56)				
4. Will like RE math less, same, or more than SE math? (1=less; 5=more)	Pre	2.46 (1.56)	3.17 (1.59)	3.36 (1.69)	2.64 (1.80)	7.44**	0.33	1.99	1.99
	Mid	3.69 (1.11)	3.00 (1.28)	4.18 (1.33)	3.45 (1.57)				
5. How much help will RE math teacher give? (1=very little; 5=a lot)	Pre	3.31 (1.49)	3.00 (1.41)	3.00 (1.84)	3.36 (1.36)	4.56*	0.00	2.23	1.33
	Mid	3.77 (1.30)	3.33 (1.23)	3.91 (1.38)	3.27 (1.35)				
6. How difficult will RE math be? (1=very difficult; 5=easy)	Pre	3.08 (1.26)	2.58 (1.16)	2.64 (1.36)	2.55 (1.37)	12.27***	0.47	1.35	1.12
	Mid	3.62 (0.96)	3.08 (1.08)	3.82 (1.17)	2.91 (1.22)				
7. What expectations by RE math teacher? (1=low; 5=same as for others)	Pre	4.08 (1.19)	4.08 (1.16)	3.18 (1.47)	3.45 (1.44)	0.38	6.05*	2.29	0.29
	Mid	3.92 (1.38)	3.58 (1.51)	4.09 (1.22)	3.64 (1.36)				
8. Will RE math teacher grade you the same as others? (1=easier; 5=same)	Pre	2.92 (1.80)	3.83 (1.27)	4.27 (0.90)	4.18 (1.33)	0.01	0.78	1.93	0.35
	Mid	2.69 (1.32)	4.50 (0.67)	3.91 (0.83)	4.18 (1.08)				
9. How friendly will RE math teacher be? (1=not; 5=very)	Pre	4.38 (1.19)	4.17 (0.83)	4.09 (1.04)	3.45 (1.44)	4.94*	0.02	0.81	0.05
	Mid	4.85 (0.38)	4.33 (0.98)	4.45 (0.82)	3.64 (1.21)				
10. How friendly will RE math classmates be? (1=not; 5=very)	Pre	4.23 (0.93)	3.58 (0.90)	4.18 (0.75)	3.45 (0.93)	5.65*	1.19	3.55^{+}	0.00
	Mid	4.46 (0.88)	4.33 (0.98)	4.09 (1.04)	3.91 (1.04)				
11. Will you fit in with the other kids in RE math class? (1=no, belong in SE; 5=yes, will feel like belong in RE)	Pre	2.77 (1.64)	3.17 (1.47)	4.18 (0.98)	2.73 (1.62)	11.39**	2.57	4.70*	11.23**
	Mid	4.38 (0.77)	3.08 (1.44)	4.27 (1.10)	3.18 (1.72)				

Note. RE = regular education; SE = special education.

$^{+}p < .10$. $^{*}p \leq .05$. $^{**}p < .01$. $^{***}p \leq .001$.

Table 6. Reintegrated Students' Math Scores (Digits Correct) across Year 1 by Treatment Group ($n = 38$)

	TP ($n = 23$)		No TP ($n = 15$)					
	CBM ($n = 12$)	No CBM ($n = 11$)	CBM ($n = 9$)	No CBM ($n = 6$)	TIME	TP x TIME	CBM x TIME	TP x CBM x TIME
Time	M (SD)	M (SD)	M (SD)	M (SD)	$F(2,68)$	$F(2,68)$	$F(2,68)$	$F(2,68)$
Pretreatment	58.83 (26.64)	58.91 (25.53)	53.56 (18.83)	54.33 (29.28)	20.21^{***}	0.36	2.42^{+}	1.84
Midtreatment	67.25 (18.02)	62.64 (25.22)	64.11 (20.99)	56.17 (28.32)				
Posttreatment	72.50 (18.18)	72.00 (25.07)	71.56 (23.30)	57.67 (21.78)				

Note. Pre- and midtreatment reflect performance in special education; posttreatment, in regular education.

$^{+}p < .10$. $^{***}p < .001$.

Table 7. Reintegrated Students' Attitude Questionnaires across Year 1 by Treatment Group (n = 38)

Questions	Time point	TP (n = 23) CBM (n=12) M (SD)	TP (n = 23) No CBM (n=11) M (SD)	No TP (n = 15) CBM (n=9) M (SD)	No TP (n = 15) No CBM (n=6) M (SD)	TIME $F(2,68)$	TP x TIME $F(2,68)$	CBM x TIME $F(2,68)$	TP x CBM x TIME $F(2,68)$
1. Belong in SE math? (1=definitely yes, 5=absolutely not)	Pre	3.08 (1.38)	3.45 (1.44)	2.89 (1.69)	2.83 (1.17)	6.49**	0.30	4.37*	3.03+
	Mid	4.08 (1.08)	2.55 (0.82)	3.56 (1.67)	2.83 (1.17)				
	Post	4.00 (1.28)	3.82 (0.98)	4.67 (0.50)	3.00 (1.26)				
2. How confident that you are good RE math student? (1=not; 5=very)	Pre	3.58 (1.31)	3.27 (1.49)	3.78 (1.48)	2.50 (1.38)	2.45+	0.30	0.06	0.75
	Mid	4.42 (0.79)	3.36 (1.57)	4.00 (1.12)	3.17 (1.17)				
	Post	4.08 (0.67)	3.45 (1.21)	4.44 (0.88)	3.17 (1.17)				
3. How do you feel about having left SE math ? (1=very sad; 5=very happy)	Pre	2.92 (1.44)	3.18 (1.40)	4.22 (1.20)	2.83 (1.33)	1.92	0.66	0.85	0.85
	Mid	3.83 (1.34)	3.09 (1.38)	4.56 (0.73)	3.00 (1.26)				
	Post	4.00 (0.95)	3.45 (1.29)	4.22 (0.83)	3.17 (1.33)				
4. Do you like RE math less, same, or more than SE math? (1=less; 5=more)	Pre	2.58 (1.56)	3.18 (1.66)	3.33 (1.87)	2.83 (1.83)	3.81*	1.00	2.28	0.19
	Mid	3.58 (1.08)	3.09 (1.30)	4.56 (0.88)	3.67 (1.51)				
	Post	4.00 (0.95)	3.18 (1.40)	4.33 (1.12)	2.83 (1.47)				
5. How much help does RE math teacher give? (1=very little; 5=a lot)	Pre	3.25 (1.54)	2.91 (1.45)	3.22 (1.92)	2.67 (1.21)	9.85***	0.82	0.14	0.76
	Mid	3.75 (1.36)	3.36 (1.29)	4.00 (1.50)	3.17 (1.17)				
	Post	4.67 (0.49)	3.73 (1.10)	3.89 (1.54)	3.50 (1.64)				
6. How difficult is RE math? (1=very hard; 5=easy)	Pre	3.08 (1.31)	2.55 (1.21)	2.89 (1.36)	2.00 (1.10)	7.84***	0.97	0.27	1.17
	Mid	3.67 (0.98)	3.09 (1.14)	4.11 (0.78)	2,67 (1.03)				
	Post	3.67 (0.98)	2.64 (1.03)	3.67 (0.71)	3.00 (0.89)				
7. What expectations by RE math teacher? (1=low; 5=same as for others)	Pre	4.00 (1.21)	4.18 (1.17)	2.89 (1.45)	3.83 (0.75)	4.41*	2.30	2.89+	1.05
	Mid	3.83 (1.40)	3.64 (1.57)	3.89 (1.27)	3.67 (1.21)				
	Post	4.33 (1.07)	4.18 (1.08)	4.56 (0.53)	4.00 (0.89)				
8. Does RE math teacher grade you the same as others? (1=easier; 5=same)	Pre	3.08 (1.78)	3.73 (1.27)	4.33 (0.87)	3.83 (1.60)	0.45	0.92	1.94	2.22
	Mid	2.67 (1.37)	4.45 (0.69)	4.11 (0.78)	4.50 (0.84)				
	Post	3.75 (1.36)	4.09 (0.94)	3.56 (1.67)	4.50 (0.84)				
9. How friendly is RE math teacher? (1=not; 5=very)	Pre	4.33 (1.23)	4.18 (0.87)	4.22 (1.09)	3.33 (1.37)	3.14*	0.17	2.00	0.86
	Mid	4.83 (0.39)	4.27 (1.01)	4.78 (0.44)	3.17 (1.17)				
	Post	4.83 (0.39)	4.36 (1.03)	4.56 (0.73)	3.83 (1.17)				
10. How friendly are RE math classmates? (1=not; 5=very)	Pre	4.17 (0.94)	3.55 (0.93)	4.22 (0.67)	3.83 (1.17)	1.45	1.23	2.04	0.00
	Mid	4.42 (0.90)	4.27 (1.01)	4.11 (1.05)	4.17 (0.98)				
	Post	4.17 (0.94)	4.27 (0.79)	3.67 (1.41)	4.00 (1.26)				
11. Do you fit in with other kids in RE math class? (1=no, belong in SE; 5=yes, belong in RE)	Pre	2.58 (1.56)	3.18 (1.54)	4.44 (0.88)	2.33 (1.21)	7.88***	0.57	1.33	3.09*
	Mid	4.33 (0.78)	3.09 (1.51)	4.67 (0.71)	2.83 (1.60)				
	Post	4.42 (0.79)	3.73 (1.27)	4.78 (0.44)	3.50 (0.55)				

Note. RE = regular education; SE = special education.

+ Significant at $p < .10$. * Significant at $p < .05$. ** Significant at $p < .01$. *** Significant at $p \leq .001$.

Table 8. "Success" Group's Math Scores (Digits Correct) across Year 1 and at Followup by Treatment Group (n = 20)

	TP (n = 13)				No TP (n = 7)							
	CBM (n = 8)		No CBM (n = 5)		CBM (n = 4)		No CBM (n = 3)		TIME	TP x TIME	CBM x TIME	TP x CBM x TIME
Time	M	(SD)	M	(SD)	M	(SD)	M	(SD)	$F(3,48)$	$F(3,48)$	$F(3,48)$	$F(3,48)$
Pretreatment	51.13	(26.04)	59.20	(31.28)	54.25	(13.00)	51.33	(9.50)	19.09*	0.67	1.62	1.06
Midtreatment	64.50	(20.70)	65.60	(28.78)	63.25	(14.31)	48.33	(18.72)				
Posttreatment	71.25	(21.16)	75.00	(31.05)	70.00	(14.28)	52.33	(21.73)				
Followup	80.88	(9.00)	85.00	(22.78)	73.75	(20.81)	81.00	(25.71)				

Note. Pre- and midtreatment reflect performance in special education; posttreatment and followup, in regular education.

*$p < .001$.

Table 9. "Success" Group's Attitude Questionnaires across Year 1 and at Followup by Treatment Group (n = 20)

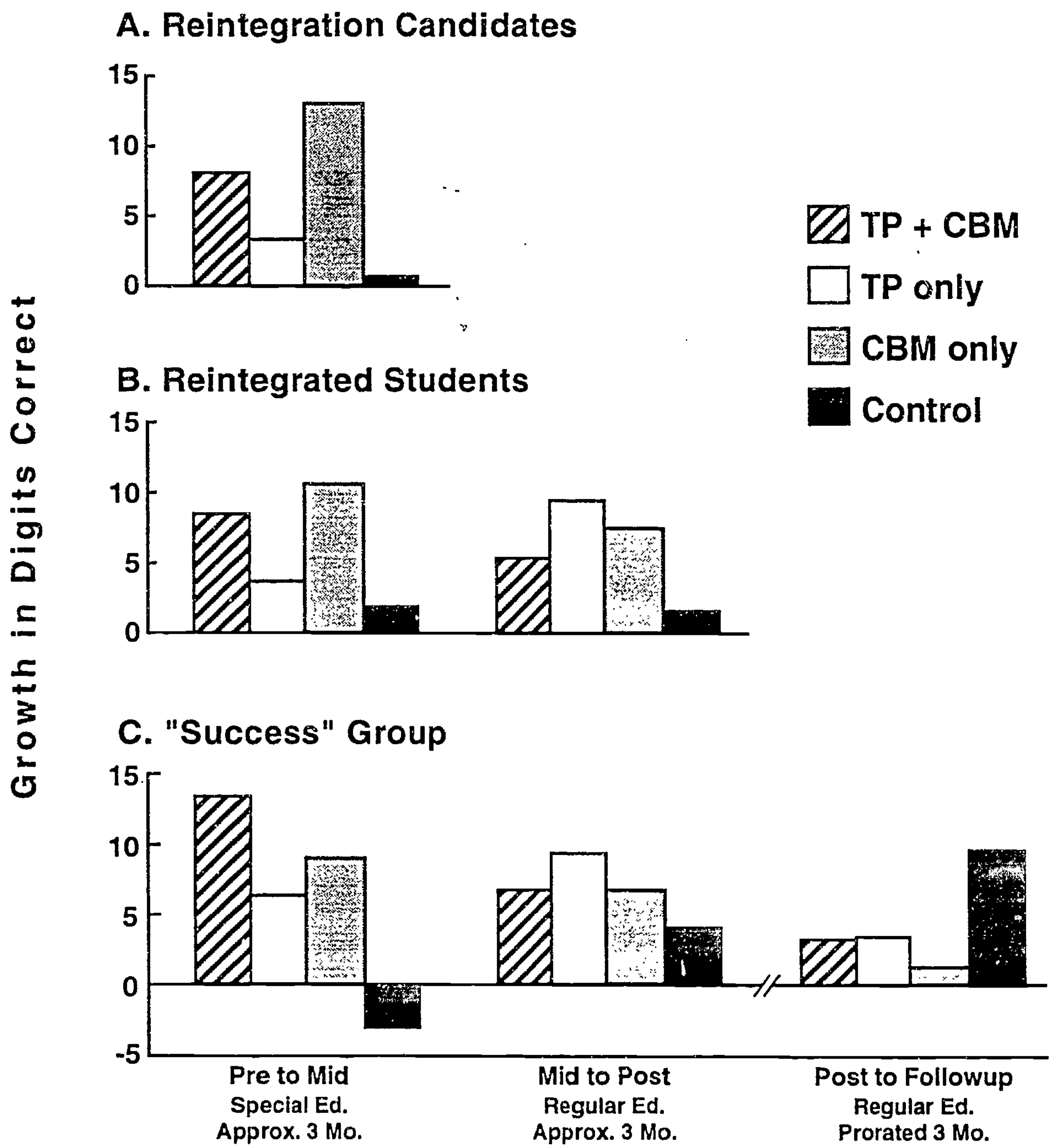
Questions	Time point	TP (n = 13) CBM (n=8) M	(SD)	TP (n = 13) No CBM (n=5) M	(SD)	No TP (n = 7) CBM (n=4) M	(SD)	No TP (n = 7) No CBM (n=3) M	(SD)	TIME $F(3,48)$	TP x TIME $F(3,48)$	CBM x TIME $F(3,48)$	TP x CBM x TIME $F(3,48)$
1. Belong in SE math?	Pre	3.00	(1.31)	3.40	(1.34)	2.00	(2.00)	2.33	(1.53)	5.23**	1.03	4.00**	1.29
(1=definitely yes, 5=absolutely not)	Mid	4.38	(0.92)	2.40	(0.55)	3.00	(2.31)	2.33	(1.53)				
	Post	4.13	(0.99)	3.20	(1.34)	4.75	(0.50)	2.33	(0.58)				
	Followup	3.88	(1.36)	4.00	(1.00)	4.00	(1.41)	4.00	(1.00)				
2. How confident that you are good	Pre	3.63	(1.41)	3.00	(1.58)	4.25	(0.96)	1.33	(0.58)	0.86	0.78	0.55	1.37
RE math student? (1=not; 5=very)	Mid	4.50	(0.93)	2.40	(1.67)	4.00	(1.16)	2.67	(1.53)				
	Post	4.00	(0.76)	3.20	(0.84)	4.75	(0.50)	2.67	(1.53)				
	Followup	3.88	(1.46)	3.60	(1.67)	3.50	(1.92)	2.00	(1.00)				
3. How do you feel about having left	Pre	2.75	(1.39)	3.00	(1.58)	4.25	(1.50)	2.00	(1.00)	2.85*	0.41	3.10*	0.87
SE math ? (1=very sad; 5=very happy)	Mid	4.00	(1.20)	2.40	(0.89)	4.75	(0.50)	2.33	(1.53)				
	Post	3.88	(0.99)	3.20	(1.10)	4.25	(0.96)	3.00	(2.00)				
	Followup	3.38	(2.00)	3.80	(1.10)	4.50	(1.00)	4.33	(0.58)				
4. Do you like RE math less, same, or	Pre	2.25	(1.49)	2.80	(1.79)	3.25	(1.71)	2.33	(2.31)	2.99*	0.76	0.60	0.16
more than SE math? (1=less; 5=more)	Mid	3.50	(1.20)	3.00	(0.71)	5.00	(0.00)	3.33	(2.08)				
	Post	3.88	(0.99)	3.40	(1.14)	4.50	(1.00)	2.67	(1.53)				
	Followup	4.00	(1.20)	3.40	(1.52)	4.00	(1.16)	3.00	(2.00)				
5. How much help does RE math teacher	Pre	3.25	(1.75)	3.40	(1.14)	3.75	(1.89)	2.00	(1.00)	3.00*	1.85	1.25	0.71
give? (1=very little; 5=a lot)	Mid	3.63	(1.51)	3.60	(1.52)	4.00	(2.00)	3.00	(1.00)				
	Post	4.75	(0.46)	3.80	(1.30)	4.00	(2.00)	2.67	(2.08)				
	Followup	3.63	(1.41)	3.80	(1.79)	4.25	(0.96)	4.00	(1.73)				
6. How difficult is RE math?	Pre	2.88	(1.36)	2.40	(0.89)	3.50	(1.73)	1.67	(1.16)	1.78	0.08	0.64	0.97
(1=very hard; 5=easy)	Mid	3.63	(1.06)	2.60	(0.55)	3.75	(0.96)	2.00	(1.00)				
	Post	3.75	(0.89)	2.60	(0.55)	3.50	(0.58)	3.00	(1.00)				
	Followup	3.63	(0.74)	3.00	(0.71)	3.50	(0.58)	3.00	(1.00)				
7. What expectations by RE math	Pre	4.00	(1.20)	3.80	(1.10)	4.00	(1.16)	4.00	(0.00)	1.78	1.08	0.12	0.75
teacher? (1=low; 5=same as for others)	Mid	3.63	(1.60)	3.20	(1.48)	4.25	(1.50)	4.33	(1.15)				
	Post	4.50	(1.07)	3.80	(1.30)	4.50	(0.58)	4.33	(0.58)				
	Followup	4.38	(1.41)	4.60	(0.89)	4.75	(0.50)	4.00	(1.00)				
8. Does RE math teacher grade you the	Pre	3.25	(1.91)	4.20	(1.10)	3.75	(0.96)	3.00	(2.00)	4.73**	1.06	0.58	1.97
same as others? (1=easier; 5=same)	Mid	2.63	(1.69)	4.60	(0.55)	4.25	(0.96)	4.33	(1.15)				
	Post	3.88	(1.13)	4.00	(1.00)	2.75	(1.26)	4.00	(1.00)				
	Followup	4.75	(0.71)	5.00	(0.00)	4.50	(1.00)	5.00	(0.00)				
9. How friendly is RE math teacher?	Pre	4.38	(1.41)	4.20	(0.84)	4.75	(0.50)	2.33	(1.16)	3.32*	0.95	2.73*	2.06
(1=not; 5=very)	Mid	4.75	(0.46)	4.60	(1.22)	5.00	(0.00)	2.33	(0.58)				
	Post	4.88	(0.35)	4.40	(0.89)	5.00	(0.00)	3.33	(1.53)				
	Followup	4.75	(0.46)	4.40	(0.89)	4.75	(0.50)	4.33	(0.58)				
10. How friendly are RE math	Pre	4.13	(0.99)	3.20	(0.84)	4.25	(0.96)	4.33	(0.58)	3.07*	0.84	0.34	0.50
classmates? (1=not; 5=very)	Mid	4.13	(0.99)	4.00	(1.22)	4.50	(1.00)	4.33	(1.15)				
	Post	4.13	(0.99)	4.20	(0.45)	4.00	(0.82)	4.00	(1.73)				
	Followup	4.63	(0.52)	4.40	(0.55)	4.75	(0.50)	5.00	(0.00)				
11. Do you fit in with the other	Pre	2.13	(1.55)	3.00	(1.58)	4.50	(1.00)	1.33	(0.58)	7.28***	0.76	3.32*	3.88*
kids in RE math class? (1=no, belong	Mid	4.38	(0.74)	3.00	(1.41)	4.50	(1.00)	1.67	(1.15)				
in SE; 5=yes, belong in RE)	Post	4.50	(0.76)	3.80	(1.10)	4.75	(0.50)	3.33	(0.58)				
	Followup	4.38	(0.92)	4.20	(1.10)	3.75	(1.89)	4.00	(0.00)				

Note. RE = regular education; SE = special education.

+ Significant at $p < .10$. * Significant at $p \leq .05$. ** Significant at $p < .01$. *** Significant at $p \leq .001$.

Figure Caption

Figure 1. Academic gain in special and regular education by student status, time interval, and treatment group.


A. Reintegration Candidates
B. Reintegrated Students
C. "Success" Group
Growth in Digits Correct
15
10
5
0
-5
TP + CBM
TP only
CBM only
Control
Pre to Mid
Special Ed.
Approx. 3 Mo.
Mid to Post
Regular Ed.
Approx. 3 Mo.
Post to Followup
Regular Ed.
Prorated 3 Mo.